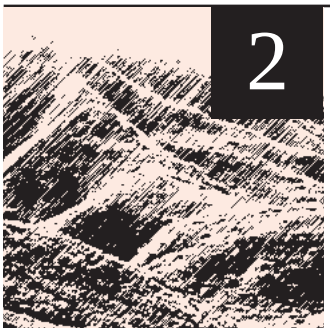

2

Mediterranean Biome

Location plays a unique role for the Mediterranean biome, as these regions occur only in select places around the globe. They are found roughly between 30° and 40° north and south latitude and are located on the western coasts of continents where the land is influenced by cold offshore ocean currents. Only 5% of the world's biomes are Mediterranean, and therefore one of the most threatened. The locations where this biome occur are: Southern California, Central Chile, Mediterranean Sea borderlands, Capetown area of South Africa, and south-western Australia.

A Mediterranean biome's climate has a mild, rainy season that coincides with winter. Its total annual precipitation ranges between 12" to 15" along the coast, and up to 40" in higher elevations. Marine air from the ocean moderates temperatures along the coast, with fog characterizing early summer. The hot, dry, summer season has average temperatures that range from 75° to 90.° The hottest months in Southern California are August and September. The temperatures of this biome are similar to those of the subtropics, moderated by its location to the sea, and by fogs associated with the cold ocean currents.

Hot, dry periods influence this biome's plant type characteristically made up of woody shrubs adapted to withstand drought. In most regions, these shrubs are evergreen and typically have small, thick, waxy leaves designed to retain moisture. Aromatic herbs, such as sage, are typical. In California these types of plants are known as *chaparral*; *maquis* in the Mediterranean; in Chile they are known as *matorral*; and in Australia they are called *mallee scrub*. Many of these plants develop on thin, rocky, degraded soils and contain highly flammable oils.

These oils are among a variety of characteristics that make this biome highly susceptible to fire. In fact, these plants are specifically adapted to fire to ensure regeneration. For example, many sprout from underground roots after a fire and have seeds that can lie dormant until a hot fire allows their seed coat to crack. Some plants are reactivated into growth by the addition of nutrients from burned vegetation, that are added to the soil; and the shape of certain plants protects the inner growth buds from destruction during hot fires.